

CLMPTO

06/26/03

L.F.

1. A device to treat tissue, comprising:
 - an outer tube;
 - an inner tube disposed at least partially within the outer tube; and
 - a dual balloon including an inner balloon and an outer balloon, the inner balloon coupled to the inner tube at a proximal end and at a distal end, the outer balloon coupled to the inner tube at a distal end and to the outer tube at a proximal end, a first interior volume defined between the outer balloon and the inner balloon in fluid communication with an inlet in the volume between the outer tube and the inner tube.
2. The device of claim 1, wherein the inner tube further defines:
 - a guidewire lumen;
 - a supply lumen; and
 - a return lumen.
3. The device of claim 2, wherein the supply lumen defines a hole such that a fluid flowing in the supply lumen may be caused to flow into a volume defined by the inner balloon, and wherein the return lumen defines a hole such that a fluid flowing in a volume defined by the inner balloon may be caused to flow into the return lumen.
4. The device of claim 2, wherein the guidewire lumen extends from a proximal end of the inner tube to a distal end of the inner tube.

BEST AVAILABLE COPY

Art Unit: 3739

5. The device of claim 1, further comprising at least two radially extending tabs disposed around a circumference of the inner tube to substantially center the inner tube within the dual balloon.
6. The device of claim 1, further comprising at least one marker band disposed on the inner tube to locate a working region of the device at a desired location.
7. The device of claim 1, further comprising a source of chilled fluid having a supply tube and a return tube, the supply tube coupled in fluid communication to the supply lumen and the return tube coupled in fluid communication to the return lumen.
8. The device of claim 1, further comprising a source of fluid, the source of fluid coupled in fluid communication to the volume between the inner balloon and the outer balloon.
9. The device of claim 7, wherein the fluid is a perfluorocarbon.
10. The device of claim 9, wherein the fluid is Galden® fluid.
11. The device of claim 10, wherein the fluid is Galden® fluid MT-55.
12. The device of claim 8, wherein the fluid includes contrast media.

BEST AVAILABLE COPY

Art Unit: 3739

13. The device of claim 8, wherein the source of fluid includes a gear pump.
14. The device of claim 13, wherein the gear pump is one selected from the group consisting of a radial spur gear pump and a helical tooth gear pump.

CLAIMS 15-44 CANCELLED.

BEST AVAILABLE COPY